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| EXAMINER | |
|---|---|
| ZHAO, DAQUAN | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/612,095 | SHIAH ET AL. | |
| | Examiner | Art Unit | |
| | Daquan Zhao | 2621 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *18 May 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-4 and 7-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 7-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### Claim Status

1. Claims 5 and 6 are cancelled, and claim 10 is new.

### *Response to Arguments*

2. The rejections of claims 1, 4, 5, 6, 8 and 9 under 35 U.S.C 103 (a) as being unpatentable over Ishii et al and Klaassen et al are withdrawn, and corresponding arguments are moot.

3. On page 11 of remark, applicant argues the motivation of combination of DeCarmo and Sasaki is a result of improper hindsight.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

4. On page 9 of the remark, applicant argues deCarmo fails to disclose the amended claim feature of storing a large amount of video data to non-volatile storage device. However, the examiner was not relying on deCarmo for the "non-volatile storage device" in the last office action. Page 6 of the last office action, the examiner took official notice for the non-volatile memory. Applicant did not change the official

notice. However, Holt (US 4,139,869), column 3, lines 57-65 is the evidence storing a large amount of data to the non-volatile storage.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-3, 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over deCarmo (US 6,381,404 B1) and in view of Sasaki et al (US 6,836,454 B2).

For claim 1, deCarmo teaches a method for playing back optical videodisc by using an optical disc drive (e.g. figure 1, DVD drive 104, and DVD 102, column 4, line 56-65) the method comprising the following steps:

b) storing the video data to a storage device (e.g. column 5, line 48- column 6, line 5, read-ahead the data from the DVD to cache).

d) according to a video playing speed, a video play back device continuously acquiring and playing back the video data from the storage device (e.g. column 5, line 48- column 6, line 5, continue uninterrupted palyback from the cache)

e) outputting the video data to a video display unit (e.g. column 5, lines 12-22, TV monitor).

However, deCarmo fails to teaches a) reading video a data from an optical videodisc at highest possible speed of the optical disc drive c) halting the operation of the optical disc after the reading process has completed in order to avoid the unnecessary free running during idling time for power saving purpose.

Sasaki et al teach a) reading video a data from an optical videodisc at highest possible speed of the optical disc drive c) halting the operation of the optical disc after the reading process has completed in order to avoid the unnecessary free running during idling time for power saving purpose (e.g. column 1, lines 26-38). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Sasaki et al into the teaching of decarmo to read-ahead using the maximum speed to read necessary information as quickly as possible from the disk and to stop the disk after the reading is done to lower the power consumption and noise for the DVD drive (Sasaki et al, column 1, lines 26-38).

deCarmo and Sasaki et al fail to specify the non-volatile storage device. The examiner takes official notice of he non-volatile storage device since it is well known in the art. It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the he hard disc into the system disclosed by deCarmo and Sasaki et al to increase the storage capacity for the system.

For claim 2, deCarmo teaches the said optical videodisc can be a VCD, SVCD or DVD (e.g. figure 1, DVD 102).

For claim 3, deCarmo teaches the optical disc drive can be a CD ROM, DVD ROM, CD R/W, DVD R/W or DVD RAM (e.g. figure 1, DVD drive 104).

For claims 8 and 9, deCarmo teaches the video display unit is a television ((e.g. column 5, lines 12-22, TV monitor).

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over deCarmo (US 6,381,404 B1) and Sasaki et al (US 6,836,454 B2) as applied to claims 1-3, 8-9 above, and further in view of Logan et al (US 5,371,551).

See the teaching of deCarmo and Sasaki et al (or the teaching of Ishii et al and Klaassenet al) above.

For claim 7, deCarmo and Sasaki et al (or the teaching of Ishii et al and Klaassenet al) fail to teach simultaneously acquiring and playing back the video data from the storage device. Logan et al teach simultaneously acquiring and playing back the video data from the storage device (e.g. column 3, lines 8-24, dual-port ram 6). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the dual-port RAM disclosed by Logan et al into the system of deCarmo and Sasaki et al to reduce the waiting time of the user since Logan et al suggest the video can be view prior to the memory is fully loaded (Logan et al, column 3, lines 46-54).

1. Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over deCarmo (US 6,381,404 B1) and Sasaki et al (US 6,836,454 B2) as applied to claims 1-3, 8-9 above.

See the teaching of deCarmo and Sasaki et al above.

For claim 4, deCarmo and Sasaki et al fail to specify the hard disc. The examiner takes official notice of he hard disc since it is well known in the art. It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the he hard disc into the system disclosed by deCarmo and Sasaki et al to increase the storage capacity for the system.

2. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over deCarmo (US 6,381,404 B1) in view of Sasaki et al (US 6,836,454 B2) and further in view of Holt (4,139,869).

For claim 10, deCarmo teaches a method for playing back optical videodisc by using an optical disc drive (e.g. figure 1, DVD drive 104, and DVD 102, column 4, line 56-65) the method comprising the following steps:

b) storing the video data to a storage device (e.g. column 5, line 48- column 6, line 5, read-ahead the data from the DVD to cache).

d) according to a video playing speed, a video play back device continuously acquiring and playing back the video data from the storage device (e.g. column 5, line 48- column 6, line 5, continue uninterrupted palyback from the cache)

e) outputting the video data to a video display unit (e.g. column 5, lines 12-22, TV monitor).

However, deCarmo fails to teaches

a) reading video a data from an optical videodisc at highest possible speed of the optical disc drive;

c) halting the operation of the optical disc after the reading process has completed in order to avoid the unnecessary free running during idling time for power saving purpose;

f) ending the output of the video data; and

g) outputting the video data directly from the non-volatile storage device.

Sasaki et al teach a) reading video a data from an optical videodisc at highest possible speed of the optical disc drive c) halting the operation of the optical disc after the reading process has completed in order to avoid the unnecessary free running during idling time for power saving purpose f) ending the output of the video data(e.g. column 1, lines 26-38). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Sasaki et al into the teaching of decarmo to read-ahead using the maximum speed to read necessary information as quickly as possible from the disk and to stop the disk after the reading is done to lower the power consumption and noise for the DVD drive (Sasaki et al, column 1, lines 26-38).

Decarmo and Sasaki et al fail to specify the non-volatile storage device and g) outputting the video data directly from the non-volatile storage device (e.g. column 3,

lines 57-65). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Holt into the teaching of deCarmo and Sasaki et al to increase the resolution data in the storage device (Holt, column 3, lines 57-65).

Applicant's amendment necessitated the new ground(s) of rejection presented in this office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEG § 706.07 (a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136 (a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing data of this action. In the event a first reply is filed within TWO MONTHS of the mailing data of this action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period. Then the shortened statutory period will expire on the data the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing data of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the data of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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